

	Type	Hits	Search Text	DBs
1	BRS	2	6403637.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
2	BRS	50	"hmg Co-A"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
3	BRS	476	atorvastatin	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
4	BRS	2892	hmg adj Coa	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
5	BRS	101976	immuno\$7	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
6	BRS	34	(hmg adj Coa) same immuno\$7	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
7	BRS	19392	immunosupp\$7	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
8	BRS	45	immunosupp\$7 same (hmg adj Coa)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
9	BRS	30	immunosupp\$7 same lovastatin	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
10	BRS	2	6022887.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
11	BRS	1055	514/423.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB

	<b>Time Stamp</b>	<b>Comments</b>	<b>Error Definition</b>	<b>Errors</b>
1	2002/08/06 17:21			0
2	2002/08/06 12:55			0
3	2002/08/06 12:56			0
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6	2002/08/06 12:58			0
7	2002/08/06 13:12			0
8	2002/08/06 13:19			0
9	2002/08/06 13:19			0
10	2002/08/06 18:24			0
11	2002/08/06 18:24			0

# STN Columbus

FILE 'HOME' ENTERED AT 04:56:17 ON 06 AUG 2002

=> fil reg

=> s atorvastatin/cn

L1 1 ATORVASTATIN/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 134523-00-5 REGISTRY

CN 1H-Pyrrole-1-heptanoic acid, 2-(4-fluorophenyl)- $\beta,\delta$ -dihydroxy-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-, ( $\beta R, \delta R$ )-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Pyrrole-1-heptanoic acid, 2-(4-fluorophenyl)- $\beta,\delta$ -dihydroxy-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-, [R-(R\*,R\*)]-

OTHER NAMES:

CN ( $\beta R, \delta R$ )-2-(p-Fluorophenyl)- $\beta,\delta$ -dihydroxy-5-isopropyl-3-phenyl-4-(phenylcarbamoyl)pyrrole-1-heptanoic acid

CN Atorvastatin

FS STEREOSEARCH

MF C33 H35 F N2 O5

CI COM

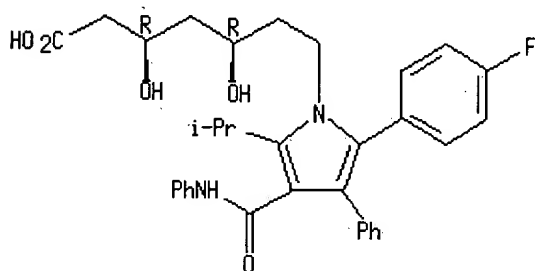
SR CA

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK\*, PHARMASEARCH, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

523 REFERENCES IN FILE CA (1967 TO DATE)

17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

534 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> sel rn name

E1 THROUGH E3 ASSIGNED

=> fil medl capl biosis uspatf

=> s e1-3

L2 2514 ("(.BETA.R,.DELTA.R)-2-(P-FLUOROPHENYL)-.BETA.,.DELTA.-DIHYDROXY

=> s e1-3

=>

=>

L3 2514 ("(.BETA.R,.DELTA.R)-2-(P-FLUOROPHENYL)-.BETA.,.DELTA.-DIHYDROXY-5-ISOPROPYL-3-PHENYL-4-(PHENYLCARBAMOYL)PYRROLE-1-HEPTANOIC

## STN Columbus

ACID"/BI OR ATORVASTATIN/BI OR 134523-00-5/BI)

=&gt; s arthrit?

L4 217891 ARTHRIT?

=&gt; s l3 and l4

L5 124 L3 AND L4

=&gt; s l3 (S) l4

L6 1 L3 (S) L4

=&gt; d

L6 ANSWER 1 OF 1 USPATFULL

Full Text

AN 2002:137034 USPATFULL

TI Methods of modulating matrix metalloproteinase activity and uses thereof  
IN Partridge, Nicola C., 8774 W. Kingsbury, St. Louis, MO, United States  
63124

PI US 6403637 B1 20020611

AI US 1999-370738 19990809 (9)

DT Utility

FS GRANTED

LN.CNT 1828

INCL INCLM: 514/455.000

INCLS: 514/451.000

NCL NCLM: 514/455.000

NCLS: 514/451.000

IC [7]

ICM: A61K031-35

EXF 514/455; 514/451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=&gt; d ibib abs kwic

L6 ANSWER 1 OF 1 USPATFULL

Full Text

ACCESSION NUMBER: 2002:137034 USPATFULL

TITLE: Methods of modulating matrix metalloproteinase activity  
and uses thereof

INVENTOR(S): Partridge, Nicola C., 8774 W. Kingsbury, St. Louis, MO,  
United States 63124

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6403637	B1	20020611
APPLICATION INFO.:	US 1999-370738		19990809 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Criares, Theodore J.		
LEGAL REPRESENTATIVE:	Thompson Coburn, LLP		
NUMBER OF CLAIMS:	27		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	29 Drawing Figure(s); 19 Drawing Page(s)		
LINE COUNT:	1828		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for inactivating matrix metalloproteinases in a vertebrate cell are disclosed. The methods comprise administering to the cell an agent which causes increased endocytosis of the matrix metalloproteinase. Methods for treating vertebrates with disorders mediated by matrix metalloproteinases are also disclosed. These methods comprise administering the above-described agents to the vertebrate. Also disclosed is the use of HMG-CoA reductase inhibitors, also known as statins, as an agent which causes increased endocytosis of matrix metalloproteinases. Assays for determining whether an agent is effective in treating a disorder are also disclosed. These assays comprise testing the agent for activity in increasing endocytosis of a matrix metalloproteinase which mediates the disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . degraded collagenase-3 was indeed enhanced (by over 320%;  $p < 0.02$ ) in the presence of pravastatin, to levels approaching those seen for non-arthritic tissues (FIG. 24). This was seen despite only a modest (30%;  $p < 0.05$ ) increase in binding. Similar results were obtained

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using atorvastatin. Results were similar but less pronounced in osteoarthritis synoviocytes. Statin treatment produced no significant changes in collagenase-3 binding or degradation. . .

=> dup rem l5  
PROCESSING COMPLETED FOR L5  
L7 124 DUP REM L5 (0 DUPLICATES REMOVED)

=> d ibib abs kwic 120-124

L7 ANSWER 120 OF 124 USPATFULL

Full Text

ACCESSION NUMBER: 1999:75632 USPATFULL  
TITLE: Substituted aminoquinolines as modulators of chemokine receptor activity  
INVENTOR(S): Hagmann, William K., Westfield, NJ, United States  
Springer, Martin S., Westfield, NJ, United States  
PATENT ASSIGNEE(S): Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5919776		19990706
APPLICATION INFO.:	US 1997-993494		19971218 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Mach, D. Margaret M.		
LEGAL REPRESENTATIVE:	Thies, J. Eric, Rose, David L.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1808		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to aminoquinolines of Formula I:  
##STR1## (wherein R1, R2, R3, and R4 are defined herein) which are useful as modulators of chemokine receptor activity. In particular, these compounds are useful as modulators of the chemokine receptors CCR-1, CCR-2, CCR-2A, CCR-2B, CCR-3, CCR-4, CCR-5, CXCR-3, and/or CXCR-4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . of inflammatory and immunoregulatory disorders and diseases, including asthma and allergic diseases, as well as autoimmune pathologies such as rheumatoid arthritis and atherosclerosis. For example, the chemokine receptor CCR-3 plays a pivotal role in attracting eosinophils to sites of allergic inflammation. . . .

SUMM . . . certain inflammatory and immunoregulatory disorders and diseases, including asthma and allergic diseases, as well as autoimmune pathologies such as rheumatoid arthritis and atherosclerosis. The invention is also directed to pharmaceutical compositions comprising these compounds and the use of these compounds and. . . .

SUMM . . . of inflammatory and immunoregulatory disorders and diseases, including asthma and allergic diseases, as well as autoimmune pathologies such as rheumatoid arthritis and atherosclerosis.

SUMM . . . Loeffler's syndrome, chronic eosinophilic pneumonia), delayed-type hypersensitivity, interstitial lung diseases (ILD) (e.g., idiopathic pulmonary fibrosis, or ILD associated with rheumatoid arthritis, systemic lupus erythematosus, ankylosing spondylitis, systemic sclerosis, Sjogren's syndrome, polymyositis or dermatomyositis); systemic anaphylaxis or hypersensitivity responses, drug allergies (e.g., to penicillin, cephalosporins), insect sting allergies; autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, multiple sclerosis, systemic lupus erythematosus, myasthenia gravis, juvenile onset diabetes; glomerulonephritis, autoimmune thyroiditis, Behcet's disease; graft rejection (e.g., in transplantation), . . . .

SUMM . . . treat inflammatory and immunoregulatory disorders and diseases, including asthma and allergic diseases, as well as autoimmune pathologies such as rheumatoid arthritis and atherosclerosis, and those pathologies noted above is illustrated by the combination of the compounds of this invention and other. . . .

SUMM . . . especially CCR-1, CCR-2, CCR-3 and CCR-5; (j) cholesterol lowering agents such as HMG-CoA reductase inhibitors (lovastatin, simvastatin and pravastatin, fluvastatin, atorvastatin, and other statins), sequestrants (cholestyramine and colestipol), nicotinic acid,

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fenofibric acid derivatives (gemfibrozil, clofibrat, fenofibrate and benzafibrate), and probucol; (k).

L7 ANSWER 121 OF 124 USPATFULL

Full Text

ACCESSION NUMBER: 1998:98932 USPATFULL  
TITLE: DHA-pharmaceutical agent conjugates of taxanes  
INVENTOR(S): Shashoua, Victor E., Brookline, MA, United States  
Swindell, Charles S., Merion, PA, United States  
Webb, Nigel L., Bryn Mawr, PA, United States  
Bradley, Matthews O., Laytonsville, MD, United States  
PATENT ASSIGNEE(S): Neuromedica, Inc., Conshohocken, PA, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5795909		19980818
APPLICATION INFO.:	US 1996-651312		19960522 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jarvis, William R. A.		
LEGAL REPRESENTATIVE:	Wolf, Greenfield & Sacks, P.C.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	27 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	2451		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides conjugates of cis-docosahexaenoic acid and taxanes useful in treating cell proliferative disorders. Conjugates of paclitaxel and docetaxel are preferred.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . androgen; anesthesia, adjunct to; anesthetic; anorectic; antagonist; anterior pituitary suppressant; anthelmintic; antiacne agent; anti-adrenergic; anti-allergic; anti-amebic; anti-androgen; anti-anemic; antianginal; anti-anxiety; anti-arthritic; anti-asthmatic; anti-atherosclerotic; antibacterial; anticholelithic; anticholelithogenic; anticholinergic; anticoagulant; anticoccidal; anticonvulsant; antidepressant; antidiabetic; antidiarrheal; antidiuretic; antidote; anti-emetic; anti-epileptic; anti-estrogen; antifibrinolytic; antifungal; antiglaucoma. . .

DETD Anti-arthritic: Lodelaben.

DETD Inhibitor: Acarbose; Atorvastatin Calcium; Benserazide; Brocresine; Carbidopa; Clavulanate Potassium; Dazmegrel; Docebenone; Epoprostenol; Epoprostenol Sodium; Epristeride; Finasteride; Flurbiprofen Sodium; Furegrelate Sodium; Lufironil; Miglitol; Orlistat;. . .

DETD . . . adrenocortical steroid; adrenocortical suppressant; aldosterone antagonist; amino acid; anabolic; androgen; antagonist; anthelmintic; anti-acne agent; anti-adrenergic; anti-allergic; anti-amebic; anti-androgen; anti-anemic; anti-anginal; anti-arthritic; anti-asthmatic; anti-atherosclerotic; antibacterial; anticholelithic; anticholelithogenic; anticholinergic; anticoagulant; anticoccidal; antidiabetic; antidiarrheal; antidiuretic; antidote; anti-estrogen; antifibrinolytic; antifungal; antiglaucoma agent; antihemophilic; antihemorrhagic; antihistamine;. . .

L7 ANSWER 122 OF 124 USPATFULL

Full Text

ACCESSION NUMBER: 1998:48446 USPATFULL  
TITLE: Chroman derivatives as anti-oxidants  
INVENTOR(S): Trivedi, Bharat Kakidas, Farmington Hills, MI, United States  
PATENT ASSIGNEE(S): Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5747528		19980505
APPLICATION INFO.:	US 1997-788534		19970124 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-12023P	19960221 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	

# STN Columbus

PRIMARY EXAMINER: Northington-Davis, Zinna  
 LEGAL REPRESENTATIVE: Anderson, Elizabeth M.  
 NUMBER OF CLAIMS: 19  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Chroman derivatives of Formula I or a pharmaceutically acceptable salt thereof are inhibitors of VCAM-1 and ICAM-1 and are thus useful in the treatment of inflammation, atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection ##STR1## wherein: R=Hydrogen or phenyl;

R2 =Hydrogen or lower alkyl of from 1-4 carbon atoms;

X=Oxygen or Sulfur;

Y=(CH2)n, --NR' where R' is hydrogen, alkyl of from 1 to 12 carbon atoms or aryl of from 6 to 10 carbon atoms, or Z; and Z is an alkyl or aryl containing moiety.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB . . . of VCAM-1 and ICAM-1 and are thus useful in the treatment of inflammation, atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection ##STR1## wherein: R=Hydrogen or phenyl;

SUMM . . . present invention relates to novel compounds and medical methods of treatment of inflammation, atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection. More particularly, the present invention concerns the use of chroman derivatives.

SUMM . . . to vascular endothelium represents an early event in pathologies involving chronic inflammation. These include atherosclerosis, restenosis, and immune disorders like arthritis and transplant rejection. The adhesion of monocytes to endothelium is mediated by expression of cell-surface molecules on endothelial cells. These . . .

SUMM . . . and ICAM-1 and are thus useful as agents for the treatment of inflammation, atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection.

SUMM . . . disclosed in U.S. Pat. No. 4,346,227; simvastatin disclosed in U.S. Pat. No. 4,444,784; fluvastatin disclosed in U.S. Pat. No. 4,739,073; atorvastatin disclosed in U.S. Pat. Nos. 4,681,893 and 5,273,995; and the like. U.S. Pat. Nos. 4,231,938, 4,346,227, 4,444,784, 4,681,893, 4,739,073, and. . .

SUMM The chromans are valuable agents for the treatment of inflammation, atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection. The tests employed indicate that the compounds possess activity against VCAM-1 and ICAM-1.

SUMM In therapeutic use as agents for the treatment of atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection, the compounds utilized in the pharmaceutical methods of this invention are administered at the initial dosage of. . .

L7 ANSWER 123 OF 124 USPATFULL

Full Text

ACCESSION NUMBER: 96:70580 USPATFULL

TITLE: Methods of preparing  $\alpha$ -phosphonosulfinate squalene synthetase inhibitors

INVENTOR(S): Lawrence, R. Michael, 48 W. Crown Ter., Yardley, PA, United States 19067  
 Biller, Scott A., 136 Nancy La., Ewing, NJ, United States 08638  
 Fryszman, Olga M., 63 Riverside Dr., Princeton, NJ, United States 08540

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5543542		19960806
APPLICATION INFO.:	US 1995-445604		19950522 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-295121, filed on 24 Aug 1994, now patented, Pat. No. US 5447922		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Richter, Johann		
ASSISTANT EXAMINER:	Ambrose, Michael G.		

## STN Columbus

LEGAL REPRESENTATIVE: Rodney, Burton  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1,2,3  
LINE COUNT: 1258

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB  $\alpha$ -Phosphonosulfinate compounds are provided which inhibit the enzyme squalene synthetase and thereby inhibit cholesterol biosynthesis. These compounds have the formula ##STR1## wherein R2 is OR5 or R5a ; R3 and R5 are independently H, alkyl, arylalkyl, aryl or cycloalkyl; R5a is alkyl, arylalkyl or aryl; R4 is H or a pharmaceutically acceptable cation; Z is H, halogen, lower alkyl or lower alkenyl; and R1 is a lipophilic group which contains at least 7 carbons and is alkyl, alkenyl, alkynyl, mixed alkenyl-alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, cycloheteroalkyl, cycloheteroalkylalkyl; including pharmaceutically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . lowering blood pressure, lowering blood sugar, treating diabetes mellitus, treating inflammation, as a diuretic, as an inotropic agent, as an anti-arthritic (antirheumatic) agent, in treating other diseases of calcium and phosphate metabolism including treatment of bone resorption, Paget's disease, osteoporosis, calcification. . . .  
SUMM . . . and/or antiatherosclerotic agent such as one or more HMG CoA reductase inhibitors, for example, pravastatin, lovastatin, simvastatin, velostatin, fluvastatin, rivastatin, atorvastatin, compactin, SDZ-63,370 (Sandoz), CI-981 (W-L), HR-780, L-645,164, CL-274,471, dalvastatin,  $\alpha$ -,  $\beta$ -, and  $\gamma$ -tocotrienol, (3R, 5S, 6E)-9,9-bis(4-fluorophenyl)-3,5-dihydroxy-8-(1-methyl-1H-tetrazol-5-yl)-6,8-nonadienoic acid, L-arginine salt, (S)-4-[[2-[4-(4-fluorophenyl)-5-methyl-2-(1-methylethyl)-6-phenyl-3-pyridinyl]ethenyl]hydroxy-phosphinyl]-3-hydroxy-butanoic. . . .

L7 ANSWER 124 OF 124 USPATFULL

Full Text

ACCESSION NUMBER: 95:80293 USPATFULL  
TITLE:  $\alpha$ -phosphonosulfinic squalene synthetase inhibitors  
INVENTOR(S): Lawrence, R. Michael, Yardley, PA, United States  
Billar, Scott A., Ewing, NJ, United States  
Fryszman, Olga M., Princeton, NJ, United States  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5447922		19950905
APPLICATION INFO.:	US 1994-295121		19940824 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Ramsuer, Robert W.		
ASSISTANT EXAMINER:	Ambrose, Michael G.		
LEGAL REPRESENTATIVE:	Rodney, Burton		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1319		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB  $\alpha$ -Phosphonosulfinate compounds are provided which inhibit the enzyme squalene synthetase and thereby inhibit cholesterol biosynthesis. These compounds have the formula ##STR1## wherein R2 is OR5 or R5a ; R3 and R5 are independently H, alkyl, arylalkyl, aryl or cycloalkyl; R5a is alkyl, arylalkyl or aryl; R4 is H or pharmaceutically acceptable cation; Z is H, halogen, lower alkyl or lower alkenyl; and R1 is a lipophilic group which contains at least 7 carbons and is alkyl, alkenyl, alkynyl, mixed alkenyl-alkynyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, cycloheteroalkyl, cycloheteroalkylalkyl; as further defined above; including pharmaceutically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . lowering blood pressure, lowering blood sugar, treating diabetes mellitus, treating inflammation, as a diuretic, as an inotropic agent, as an anti-arthritic (antirheumatic) agent, in treating other diseases of calcium and phosphate metabolism including treatment of bone



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resorption, Paget's disease, osteoporosis, calcification. . .  
SUMM . . . and/or antiatherosclerotic agent such as one or more HMG CoA  
reductase inhibitors, for example, pravastatin, lovastatin, simvastatin,  
velostatin, fluvastatin, rivastatin, atorvastatin, compactin,  
SDZ-63,370 (Sandoz), CI-981 (W-L) , HR-780, L-645,164, CL-274,471,  
dalvastatin,  $\alpha$ -,  $\beta$ -, and  $\gamma$ -tocotrienol,  
(3R,5S,6E)-9,9-bis(4-fluorophenyl) -3,5-dihydroxy-8-(1-methyl-1H-  
tetrazol-5-yl)-6,8-nonadienoic acid, L-arginine salt,  
(S)-4-[[2-[4-(4-fluorophenyl)]. . .

=> s HMG-CoA  
L8 14169 HMG-COA

=> s 18 and 14  
L9 223 L8 AND L4

=> s 18 (S) 14  
L10 23 L8 (S) L4

=> dup rem 110  
PROCESSING COMPLETED FOR L10  
L11 23 DUP REM L10 (0 DUPLICATES REMOVED)

=> d ibib abs kwic 20-23

L11 ANSWER 20 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 85:65150 USPATFULL  
TITLE: Protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4551279		19851105
APPLICATION INFO.:	US 1984-569089		19840109 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Warren, Charles F.		
ASSISTANT EXAMINER:	Flaherty, Elizabeth A.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	13		
EXEMPLARY CLAIM:	1		
LINE COUNT:	899		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the  
degradation of elastin and other proteins and thereby preventing or  
retarding the disease states caused by said degradation by administering  
compounds, some of which are novel, of the formula: ##STR1## or their  
pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human  
neutrophils are attracted to diseased joints where they engage in  
phagocytosis of locally generated immune complexes. . . also be  
useful in the treatment of other enzyme related diseases, such as  
fibrosis related to prolylhydroxylase, hypercholesterolemia related to  
HMG CoA reductase, inflammatory bowel diseases and the like. The  
compound are in addition cytoprotective. This invention is not limited  
to these. . .

L11 ANSWER 21 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 85:11975 USPATFULL  
TITLE: [Halo-4-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-  
phenyl]octadecan-ols and -ones  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G.D. Searle & Co., Skokie, IL, United States (U.S.  
corporation)

NUMBER	KIND	DATE
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## STN Columbus

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PATENT INFORMATION: US 4501895 19850226  
APPLICATION INFO.: US 1984-627324 19840702 (6)  
RELATED APPLN. INFO.: Division of Ser. No. US 1983-492843, filed on 9 May  
1983, now patented, Pat. No. US 4469885  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Daus, Donald G.  
ASSISTANT EXAMINER: Gibson, S. A.  
LEGAL REPRESENTATIVE: McDonnell, John J.  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
LINE COUNT: 640

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel compounds for preventing or retarding the degradation of elastin or other proteins and therefore preventing or retarding the disease states caused by said degradation, of the formula: ##STR1## or its pharmacologically acceptable salts. The invention also relates to novel methods and intermediates for making the compounds. The intermediate compound being of the formula: ##STR2## wherein R2 is

(a) halogen; or

(b) trifluoromethyl;

wherein R3 is

(a) --C(O)R4 ;

(b) --CH(OH)R4 ;

(c) --CH2 R 4; or

(d) --CH.dbd.CHR4 ;

wherein R4 is alkyl or 13 to 25 carbon atoms inclusive, and the pharmacologically acceptable base addition salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human neutrophils are attracted to diseased joints where they engage in phagocytosis of locally generated immune complexes. . . also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples. One skilled in the art could readily use. . .

L11 ANSWER 22 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 85:9175 USPATFULL  
TITLE: Protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 4499295		19850212
APPLICATION INFO.:	US 1983-492842		19830509 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
LINE COUNT:	524		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human

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neutrophils are attracted to diseased joints where they engage in phagocytosis of locally generated immune complexes. . . also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples as one skilled in the art could readily. . .

L11 ANSWER 23 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 84:50007 USPATFULL  
TITLE: Halogenated protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4469885		19840904
APPLICATION INFO.:	US 1983-492843		19830509 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
LINE COUNT:	635		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel compounds for preventing or retarding the degradation of elastin or other proteins and therefore preventing or retarding the disease states caused by said degradation, of the formula: ##STR1## or its pharmacologically acceptable salts. The invention also relates to novel methods and intermediates for making the compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human neutrophils are attracted to diseased joints where they engage in phagocytosis of locally generated immune complexes. . . also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples. One skilled in the art could readily use. . .

=&gt; d ibib abs kwic 15-19

L11 ANSWER 15 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 1998:85784 USPATFULL  
TITLE: Screening natural samples for new therapeutic compounds using capillary electrophoresis  
INVENTOR(S): Hughes, Dallas E., Dover, MA, United States  
Karger, Barry L., Newton, MA, United States  
PATENT ASSIGNEE(S): Northeastern University, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5783397		19980721
APPLICATION INFO.:	US 1996-662085		19960612 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-503P	19951211 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Feisee, Lila	
ASSISTANT EXAMINER:	Ungar, Susan	
LEGAL REPRESENTATIVE:	Weingarten, Schurgin, Gagnebin & Hayes LLP	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	33 Drawing Figure(s); 12 Drawing Page(s)	
LINE COUNT:	1077	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method in which natural sample components are simultaneously

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fractionated and screened for compounds that bind tightly to specific molecules of interest is disclosed. Such newly isolated ligands are good candidates for potential therapeutic or diagnostic compounds. The natural sample is first combined with a potential target molecule and then subjected to capillary electrophoresis (CE). Charged (or even neutral) compounds present in the natural sample that bind to the added target molecule can alter its normal migration time upon CE, by changing its charge-to-mass ratio, or will cause a variation in peak shape or area. Complex formation can be detected by simply monitoring the migration of the target molecule during electrophoresis. Any new ligands that bind to the target molecule will be good candidates for therapeutic or diagnostic compounds. Interfering, weak-binding ligands commonly present in crude extracts are not detected. Small, neutral ligands, as well as charged ligands, can be identified in competitive binding experiments with known, charged competitor molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD

Molecular Target	Associated Disease(s)
HIV reverse transcriptase	
	AIDS
HIV protease	AIDS
Carbonic anhydrase	Glaucoma
Tubulin	Cancer
Thrombin	Blood clots
HMG-CoA reductase	High cholesterol
Elastase	Emphysema, Rh. arthritis
Cyclooxygenase	Inflammation
p56, p59 tyrosine kinases	
	Cancer
Topoisomerases	Cancer

L11 ANSWER 16 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 96:70200 USPATFULL  
 TITLE: Controlled release nifedipine delivery device  
 INVENTOR(S): Rork, Gerald S., Lawrence, KS, United States  
 Pipkin, James D., Lawrence, KS, United States  
 PATENT ASSIGNEE(S): Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5543154		19960806
APPLICATION INFO.:	US 1994-327083		19941021 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-118836, filed on 8 Sep 1993, now patented, Pat. No. US 5366738 which is a continuation of Ser. No. US 1992-902188, filed on 29 Jul 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-815304, filed on 27 Dec 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Phelan, D. Gabrielle		
LEGAL REPRESENTATIVE:	Bigley, Francis P., Daniel, Mark R.		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)		
LINE COUNT:	933		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A device for the controlled delivery of a beneficial agent as a gelatinous dispersion consisting of (i) a core which contains a beneficial agent, a polymer which forms gelatinous microscopic particles upon hydration and if desired an agent to modulate the hydration of the polymer; and (ii) an impermeable, insoluble coating which adheres to and surrounds the core and contains apertures which provide an area for the hydration and release of a disperson comprising gelatinous microscopic particles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD In the following examples the hydroxymethyl-glutaryl-coenzyme A reductase inhibitors (HMG CoA reductase inhibitors) simvastatin and lovastatin are used as model drugs. These drugs are highly effective in

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the reduction of serum. . . at 20° C. The generation of a dispersion, in situ, from the components of a solid core is disclosed. The anti-arthritis, indomethacin and the analgesic, acetaminophen serve as examples of beneficial agents which are deliverable with this device. This permits the. . .

L11 ANSWER 17 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 94:102004 USPATFULL  
TITLE: Controlled release drug dispersion delivery device  
INVENTOR(S): Rork, Gerald S., Lawrence, KS, United States  
Pipkin, James D., Lawrence, KS, United States  
PATENT ASSIGNEE(S): Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5366738		19941122
APPLICATION INFO.:	US 1993-118836		19930908 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1982-902188, filed on 29 Jul 1982, now abandoned which is a continuation-in-part of Ser. No. US 1991-815304, filed on 27 Dec 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Phelan, D. Gabrielle		
LEGAL REPRESENTATIVE:	Bigley, Francis P., Daniel, Mark R., DiPrima, Joseph F.		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)		
LINE COUNT:	887		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A device for the controlled delivery of a beneficial agent as a gelatinous dispersion consisting of (i) a core which contains a beneficial agent, a polymer which forms gelatinous microscopic particles upon hydration and if desired an agent to modulate the hydration of the polymer; and (ii) an impermeable, insoluble coating which adheres to and surrounds the core and contains apertures which provide an area for the hydration and release of a dispersion comprising gelatinous microscopic particles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD In the following examples the hydroxymethyl-glutarylcoenzyme A reductase inhibitors (HMG CoA reductase inhibitors) simvastatin and lovastatin are used as model drugs. These drugs are highly effective in the reduction of serum. . . at 20° C. The generation of a dispersion, in situ, from the components of a solid core is disclosed. The anti-arthritis, indomethacin and the analgesic, acetaminophen serve as examples of beneficial agents which are deliverable with this device. This permits the. . .

L11 ANSWER 18 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 87:63743 USPATFULL  
TITLE: Protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Chicago, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4692552		19870908
APPLICATION INFO.:	US 1986-831238		19860218 (6)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1984-664447, filed on 24 Oct 1984 which is a continuation of Ser. No. US 1983-492842, filed on 9 May 1983, now patented, Pat. No. US 4499295		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	Kanady, Mary Jo, Matukaitis, Paul D.		
NUMBER OF CLAIMS:	2		
EXEMPLARY CLAIM:	1		
LINE COUNT:	492		

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human neutrophils are attracted to diseased joints where they engage in phagocytosis of locally generated immune complexes. . . also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples as one skilled in the art could readily. . .

L11 ANSWER 19 OF 23 USPATFULL

Full Text

ACCESSION NUMBER: 86:23528 USPATFULL  
 TITLE: Protease inhibitors  
 INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
 Partis, Richard A., Evanston, IL, United States  
 PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4584397		19860422
APPLICATION INFO.:	US 1984-664447		19841024 (6)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1983-492842, filed on 9 May 1983, now patented, Pat. No. US 4495295		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	Odre, Steven M., Melton, Stuart L.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
LINE COUNT:	492		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM During periods of active rheumatoid arthritis, vast numbers of human neutrophils are attracted to diseased joints where they engage in phagocytosis of locally generated immune complexes. . . also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples as one skilled in the art could readily. . .

=> s inflam?

L12 648033 INFLAM?

=> s l12 and l8

L13 893 L12 AND L8

=> dup rem l13

PROCESSING COMPLETED FOR L13

L14 733 DUP REM L13 (160 DUPLICATES REMOVED)

=> s l12 (S) l8

L15 335 L12 (S) L8

=> dup rem l15

PROCESSING COMPLETED FOR L15

L16 238 DUP REM L15 (97 DUPLICATES REMOVED)

=> s treat? or therap?

3 FILES SEARCHED...

L17 8905492 TREAT? OR THERAP?

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=> s 117 and 116  
L18 199 L17 AND L16

=> d ibib abs kwic 195-199

L18 ANSWER 195 OF 199 USPATFULL

Full Text

ACCESSION NUMBER: 86:23528 USPATFULL  
TITLE: Protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4584397		19860422
APPLICATION INFO.:	US 1984-664447		19841024 (6)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1983-492842, filed on 9 May 1983, now patented, Pat. No. US 4495295		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	Odre, Steven M., Melton, Stuart L.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
LINE COUNT:	492		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . broadest aspect relates to protease inhibitors. In one aspect, the invention relates to certain novel methods useful in preventing or **treating** disease states caused by the degradative action of proteases on mammalian elastin and other proteins by administration of effective amounts. . . elastase and cathepsin G. In other aspect, it relates to compounds of Formula I which are useful in preventing or **treating** disease states caused by the degradative action of proteases on mammalian elastin and other proteins.

SUMM . . . al., New England Journal of Medicine, 306: 900-909, (1982). By inhibiting elastase therefore it is possible to mediate, eliminate or **treat** a wide variety of disease conditions.

SUMM . . . and can react with good nucleophiles such as the thiol groups of glutathione and various proteins. During any long term **treatment** with these inhibitors, such non-specific alkylation could lead to the introduction of new antigenetic determinants and an autoimmune response and/or. . .

SUMM The **treatment** of certain disease states by inhibitors of elastase is known as described above. One compound useful in practicing the method. . .

SUMM . . . in a number of disease states, a compound which blocks the action of elastase will be useful in the management, **treatment** and prevention of such diseases. Elastase, in addition to degrading elastin, also will hydrolyse methoxysuccinyl-ala-ala-pro-val-nitroanalide (MSN), a highly selective synthetic. . .

SUMM Drug **treatment** was oral, once daily in 0.5 ml carboxymethyl cellulose from day 0 until sacrifice:

SUMM . . . synergistic process with cathepsin G. Cathepsin G also causes conversion of angiotensin I to angiotensin II which is associated with **inflammatory** processes, Reilley, C. F., et al., J. Biol. Chem., 257, 8619 (1982) and angiotensinogen to angiotensin II, Tonnesen, M. G., . . . al., J. Biol. Chem. 256, 10256 (1981). In a like manner, adult respiratory-distress syndrome, certain skin diseases, aging, and certain **inflammatory** processes where the disease state is connected with the localized breakdown of protein by elastase could be **treated** by elastase inhibitors, such as the compounds of this invention. For example, degradation of fibronectin, an important biological substance, could. . . J. A., and D. G. Kelley, J. Biol. Chem., 255, 8848 (1980). The compounds may also be useful in the **treatment** of other enzyme related diseases, such as fibrosis related to prolylhydroxylase,

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hypercholesterolemia related to HMG CoA reductase, and the like.  
This invention is not limited to these examples as one skilled in the art could readily.

- SUMM . . . be introduced in the forms of eyedrops, intraperitoneally, subcutaneously, or intramuscularly using forms known to the pharmaceutical art. For the **treatment** of inflammatory skin diseases, the compounds of the present invention may also be administered topically in the form of ointments, . . .
- SUMM An effective but non-toxic quantity of the compound is employed in **treatment**. The dosage regimen for elastase inhibition by the compounds of this invention is selected in accordance with a variety of. . .

L18 ANSWER 196 OF 199 USPATFULL

## Full Text

ACCESSION NUMBER: 85:65150 USPATFULL  
TITLE: Protease inhibitors  
INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States  
PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4551279		19851105
APPLICATION INFO.:	US 1984-569089		19840109 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Warren, Charles F.		
ASSISTANT EXAMINER:	Flaherty, Elizabeth A.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	13		
EXEMPLARY CLAIM:	1		
LINE COUNT:	899		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds, some of which are novel, of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- SUMM . . . broadest aspect relates to protease inhibitors. In one aspect, the invention relates to certain novel methods useful in preventing or **treating** disease states caused by the degradative action of proteases on mammalian elastin and other proteins by administration of effective amounts. . . elastase and cathepsin G. In other aspect, it relates to compounds of Formula I which are useful in preventing or **treating** disease states caused by the degradative action of proteases on mammalian elastin and other proteins.
- SUMM . . . et al., New England Journal of Medicine, 306:900-909, (1982). By inhibiting elastase therefore it is possible to mediate, eliminate or **treat** a wide variety of disease conditions.
- SUMM . . . and can react with good nucleophiles such as the thiol groups of glutathione and various proteins. During any long term **treatment** with these inhibitors, such non-specific alkylation could lead to the introduction of new antigenetic determinants and an autoimmune response and/or. . .
- SUMM The **treatment** of certain disease states by inhibitors of elastase is known as described above.
- SUMM . . . in a number of disease states, a compound which blocks the action of elastase will be useful in the management, **treatment** and prevention of such diseases. Elastase, in addition to degrading elastin, also will hydrolyse methoxysuccinyl-ala-ala-pro-val-nitroanalide (MSN), a highly selective synthetic. . .
- SUMM Drug **treatment** was oral, once daily in 0.5 ml carboxymethyl cellulose from day 0 until sacrifice:
- SUMM . . . synergistic process with cathepsin G. Cathepsin G also causes conversion of angiotensin I to angiotensin II which is associated with **inflammatory** processes, Reilley, C. F., et al., J. Biol. Chem., 257, 8619 (1982) and angiotensinogen to angiotensin II, Tonnesen, M. G., . . . al., J. Biol. Chem. 256, 10256 (1981). In a like manner, adult respiratory-distress syndrome, certain skin diseases, aging, and certain **inflammatory** processes where the disease state is connected with the localized breakdown of protein by elastase could be **treated** by elastase inhibitors, such as the compounds of this invention. For



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example, degradation of fibronectin, an important biological substance, could. . . J. A., and D. G. Kelley, J. Biol. Chem., 255, 8848 (1980). The compounds may also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, inflammatory bowel diseases and the like. The compound are in addition cytoprotective. This invention is not limited to these examples as. .

SUMM . . . be introduced in the forms of eyedrops, intraperitoneally, subcutaneously, or intramuscularly using forms known to the pharmaceutical art. For the treatment of inflammatory skin diseases, the compounds of the present invention may also be administered topically in the form of ointments, . . .

SUMM An effective but non-toxic quantity of the compound is employed in treatment. The dosage regimen for elastase inhibition by the compounds of this invention is selected in accordance with a variety of. . .

DETD . . . acid (1 N.; 200 ml) was added to the residue with stirring. The hydrochloric acid was decanted and the residue treated with hot ethyl acetate (150 ml). After filtering off insoluble material, the solvent was removed by a rotary evaporator. The. . .

DETD . . . residue was dissolved in hot toluene, filtered and cooled. A white solid methyl-2-hydroxy-5-nitro-benzoate was isolated by filtration. This material was treated with acetic anhydride (20 ml) and sulfuric acid (8 drops) at 50° C. for 1 hour. The reaction was cooled, . . .

DETD Treatment of the product of Example 51 with lithium hydroxide monohydrate in methanol-water and work-up in the usual manner gave the. . .

DETD Treatment of the product of Example 52 with sodium hydroxide in hot methanol-water and work-up in the usual manner gave the. . .

DETD 3.0 g of oleoyl chloride; 1.58 g of 5-aminosalicylic acid and 1.4 ml of triethylamine were treated in Example 51 to give the title compound m.p. ca. 179°-183° C.

DETD 0.5 g of the product from Example 55 was treated with hydrogen and palladium on carbon in solvent. The solvent was removed under a stream of nitrogen. The residue was. . .

DETD The material of Example 66 (16 g) was treated in the same manner as Example 66 to give the title compound. Its identity was confirmed by NMR, CMR, and. . .

DETD The material from Example 67 was treated with methyl alcohol (300 ml), lithium hydroxide monohydrate (6.3 g) and water (100 ml) and stirred for about 18 hrs. . .

DETD The material from Example 68 (0.007 mole) in cold benzene (40 ml) was treated with oxalyl chloride (0.007 mole). After stirring at room temperature for about 4.5 hrs. the solvent was removed on a rotary evaporator. The acid chloride was treated with 5-aminosalicylic acid in the manner of Example 23.

L18 ANSWER 197 OF 199 USPATFULL

Full Text

ACCESSION NUMBER: 85:11975 USPATFULL

TITLE: [Halo-4-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-phenyl]octadecan-ols and -ones

INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
Partis, Richard A., Evanston, IL, United States

PATENT ASSIGNEE(S): G.D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4501895		19850226
APPLICATION INFO.:	US 1984-627324		19840702 (6)
RELATED APPLN. INFO.:	Division of Ser. No. US 1983-492843, filed on 9 May 1983, now patented, Pat. No. US 4469885		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Daus, Donald G.		
ASSISTANT EXAMINER:	Gibson, S. A.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	6		
EXEMPLARY CLAIM:	1		
LINE COUNT:	640		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel compounds for preventing or retarding the degradation of elastin or other proteins and therefore preventing or

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retarding the disease states caused by said degradation, of the formula: ##STR1## or its pharmacologically acceptable salts. The invention also relates to novel methods and intermediates for making the compounds. The intermediate compound being of the formula: ##STR2## wherein R2 is (a) halogen; or

(b) trifluoromethyl;

wherein R3 is

(a) --C(O)R4 ;

(b) --CH(OH)R4 ;

(c) --CH2 R 4; or

(d) --CH.dbd.CHR4 ;

wherein R4 is alkyl or 13 to 25 carbon atoms inclusive, and the pharmacologically acceptable base addition salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . aspect, relates to enzyme inhibitors. In particular, it relates to compounds of Formula I which are useful in preventing or treating disease states caused by the action of proteases and other enzymes on mammalian elastin or other proteins. More particularly, the invention relates to certain novel compounds useful in preventing or treating disease states caused by the degradative action of elastases or cathepsin G. In another aspect, it relates to novel intermediates. . . .

SUMM . . . al., New England Journal of Medicine, 306: 900-909, (1982). By inhibiting elastase therefore it is possible to mediate, eliminate or treat a wide variety of disease conditions.

SUMM . . . and can react with good nucleophiles such as the thiol groups of glutathione and various proteins. During any long term treatment with these inhibitors, such non-specific alkylation could lead to the introduction of new antigenetic determinants and an autoimmune response and/or. . . .

SUMM The treatment of certain disease states by inhibitors of elastase is known as described above.

SUMM . . . in a number of disease states, a compound which blocks the action of elastase will be useful in the management, treatment and prevention of such diseases. Elastase, in addition to degrading elastin, also will hydrolyse methoxysuccinyl-ala-ala-pro-val-nitroanalide (MSN), a highly selective synthetic. . . .

SUMM Drug treatment is oral, once daily in 0.5 ml carboxymethyl cellulose from day 0 until sacrifice:

SUMM . . . Reilly, C. F., et al., J. Biol. Chem., 257, 8619 (1982) and angiotensinogen to angiotensin II, which is associated with inflammatory processes. Tonnesen, M. G., et al., J. Clin. Invest., 69, 25 (1982). Natural elastase inhibitors (macro molecules such as  $\alpha$ 1. . . al., J. Biol. Chem. 256, 10256 (1981). In a like manner, adult respiratory-distress syndrome, certain skin diseases, ageing, and certain inflammatory processes where the disease state is connected with the localized breakdown of protein by elastase could be treated by elastase inhibitors, such as the compounds of this invention. For example, degradation of fibronectin, an important biological substance, could. . . J. A., and D. G. Kelley, J. Biol. Chem., 255, 8848 (1980). The compounds may also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples. One skilled in the art could readily use. . . .

SUMM . . . be introduced in the forms of eyedrops, intraperitoneally, subcutaneously, or intramuscularly using forms known to the pharmaceutical art. For the treatment of inflammatory skin diseases, the compounds of the present invention may also be administered topically in the form of ointments, . . . .

SUMM An effective but non-toxic quantity of the compound is employed in treatment. The dosage regimen for elastase inhibition by the compounds of this invention is selected in accordance with a variety of. . . .

DETD . . . 20 hours, the white solid was filtered under reduced pressure was washed well with diethyl ether. The dry solid was treated with 20% sodium hydroxide (75 ml). After stirring for 30 minutes the product was extracted into diethyl ether, and the. . . .

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L18 ANSWER 198 OF 199 USPATFULL

## Full Text

ACCESSION NUMBER: 85:9175 USPATFULL  
 TITLE: Protease inhibitors  
 INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
 Partis, Richard A., Evanston, IL, United States  
 PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4499295		19850212
APPLICATION INFO.:	US 1983-492842		19830509 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
LINE COUNT:	524		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods of preventing or reducing the degradation of elastin and other proteins and thereby preventing or retarding the disease states caused by said degradation by administering compounds of the formula: ##STR1## or their pharmacologically acceptable salts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . broadest aspect relates to enzyme inhibitors. In one aspect, the invention relates to certain novel methods useful in preventing or treating disease states caused by the action of proteases and other enzymes on mammalian elastin and other proteins by administration of . . . elastase and cathepsin G. In other aspect, it relates to compounds of Formula I which are useful in preventing or treating disease states caused by the degradative action of proteases and other enzymes on mammalian elastin and other proteins.

SUMM . . . et al., New England Journal of Medicine, 306:900-909, (1982). By inhibiting elastase therefore it is possible to mediate, eliminate or treat a wide variety of disease conditions.

SUMM . . . and can react with good nucleophiles such as the thiol groups of glutathione and various proteins. During any long term treatment with these inhibitors, such non-specific alkylation could lead to the introduction of new antigenetic determinants and an autoimmune response and/or. . .

SUMM The treatment of certain disease states by inhibitors of elastase is known as described above. One compound useful in practicing the method.

SUMM . . . in a number of disease states, a compound which blocks the action of elastase will be useful in the management, treatment and prevention of such diseases. Elastase, in addition to degrading elastin, also will hydrolyse methoxysuccinyl-ala-ala-pro-val-nitroanalide (MSN), a highly selective synthetic. . .

SUMM Drug treatment was oral, once daily in 0.5 ml carboxymethyl cellulose from day 0 until sacrifice:

SUMM . . . synergistic process with cathepsin G. Cathepsin G also causes conversion of angiotensin I to angiotensin II which is associated with inflammatory processes, Reilley, C. F., et al., J. Biol. Chem., 257, 8619 (1982) and angiotensinogen to angiotensin II, Tonnesen, M. G., . . . al., J. Biol. Chem. 256, 10256 (1981). In a like manner, adult respiratory-distress syndrome, certain skin diseases, aging, and certain inflammatory processes where the disease state is connected with the localized breakdown of protein by elastase could be treated by elastase inhibitors, such as the compounds of this invention. For example, degradation of fibronectin, an important biological substance, could. . . J. A., and D. G. Kelley, J. Biol. Chem., 255, 8848 (1980). The compounds may also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples as one skilled in the art could readily. . .

SUMM . . . be introduced in the forms of eyedrops, intraperitoneally, subcutaneously, or intramuscularly using forms known to the pharmaceutical art. For the treatment of inflammatory skin diseases, the compounds of the present invention may also be administered topically in the form of ointments, . . .

# STN Columbus

SUMM An effective but non-toxic quantity of the compound is employed in treatment. The dosage regimen for elastase inhibition by the compounds of this invention is selected in accordance with a variety of. . .

L18 ANSWER 199 OF 199 USPATFULL

## Full Text

ACCESSION NUMBER: 84:50007 USPATFULL  
 TITLE: Halogenated protease inhibitors  
 INVENTOR(S): Mueller, Richard A., Glencoe, IL, United States  
 Partis, Richard A., Evanston, IL, United States  
 PATENT ASSIGNEE(S): G. D. Searle & Co., Skokie, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4469885		19840904
APPLICATION INFO.:	US 1983-492843		19830509 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Killos, Paul J.		
LEGAL REPRESENTATIVE:	McDonnell, John J.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
LINE COUNT:	635		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel compounds for preventing or retarding the degradation of elastin or other proteins and therefore preventing or retarding the disease states caused by said degradation, of the formula: ##STR1## or its pharmacologically acceptable salts. The invention also relates to novel methods and intermediates for making the compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . aspect, relates to enzyme inhibitors. In particular, it relates to compounds of Formula I which are useful in preventing or treating disease states caused by the action of proteases and other enzymes on mammalian elastin or other proteins. More particularly, the invention relates to certain novel compounds useful in preventing or treating disease states caused by the degradative action of elastases or cathepsin G. In another aspect, it relates to novel intermediates. . . .

SUMM . . . al., New England Journal of Medicine, 306: 900-909, (1982). By inhibiting elastase therefore it is possible to mediate, eliminate or treat a wide variety of disease conditions.

SUMM . . . and can react with good nucleophiles such as the thiol groups of glutathione and various proteins. During any long term treatment with these inhibitors, such non-specific alkylation could lead to the introduction of new antigenetic determinants and an autoimmune response and/or. . . .

SUMM The treatment of certain disease states by inhibitors of elastase is known as described above.

SUMM . . . in a number of disease states, a compound which blocks the action of elastase will be useful in the management, treatment and prevention of such diseases. Elastase, in addition to degrading elastin, also will hydrolyse methoxysuccinyl-ala-ala-pro-val-nitroanalide (MSN), a highly selective synthetic. . . .

SUMM Drug treatment is oral, once daily in 0.5 ml carboxymethyl cellulose from day 0 until sacrifice:

SUMM . . . Reilley, C. F., et al., J. Biol. Chem., 257, 8619 (1982) and angiotensinogen to angiotensin II, which is associated with inflammatory processes. Tonnesen, M. G., et al., J. Clin. Invest., 69, 25 (1982). Natural elastase inhibitors (macro molecules such as  $\alpha 1$ . . . al., J. Biol. Chem. 256, 10256 (1981). In a like manner, adult respiratory-distress syndrome, certain skin diseases, ageing, and certain inflammatory processes where the disease state is connected with the localized breakdown of protein by elastase could be treated by elastase inhibitors, such as the compounds of this invention. For example, degradation of fibronectin, an important biological substance, could. . . J. A., and D. G. Kelley, J. Biol. Chem., 255, 8848 (1980). The compounds may also be useful in the treatment of other enzyme related diseases, such as fibrosis related to prolylhydroxylase, hypercholesterolemia related to HMG CoA reductase, and the like. This invention is not limited to these examples. One skilled in the art could readily use. . . .

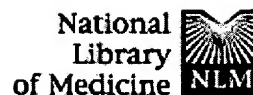
SUMM . . . be introduced in the forms of eyedrops, intraperitoneally, subcutaneously, or intramuscularly using forms known to the pharmaceutical art. For the treatment of inflammatory skin diseases,

## STN Columbus

the compounds of the present invention may also be administered topically in the form of ointments, . . .

SUMM An effective but non-toxic quantity of the compound is employed in **treatment**. The dosage regimen for elastase inhibition by the compounds of this invention is selected in accordance with a variety of. . .

DETD . . . 20 hours, the white solid was filtered under reduced pressure and washed well with diethyl ether. The dry solid was **treated** with 20% sodium hydroxide (75 ml). After stirring for 30 minutes the product was extracted into diethyl ether, and the. . .



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1: Transplant Proc 1999 May;31(3B Suppl):22S-24S

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Katznelson S.

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